Applied Research Grant
on
Pre-Spawning Salmon Mortality in Urban Creeks

Assumptions (Logic for the Project):

There is relationship between pre-spawning salmon mortality (PSM), watershed characteristics, and land use.
A scientific understanding of the causes can lead to strategies that reduce the mortality rate.
Understanding PSM can lead to policy decisions that will improve watershed health, land use and human health.
Strong partnerships coupled with research, communication and coordination are necessary to reduce pre-spawning salmon mortality.

INPUTS (DESCRIBE	ACTIVITIES (DESCRIBE)	OUTPUTS (DELIVERABLES) (QUANTIFY)	CUSTOMERS /TARGET AUDIENCE /BENEFICIARIES	SHORT TERM OUTCOMES (MEASURABLE)	MEDIUM TERM OUTCOMES (MEASURED IF POSSIBLE)	LONG TERM OUTCOMES (PROJECTED)	EPA STRATEGIC OBJECTIVES SUPPORTED
EPA Grant $$ Staff Time Materials In-kind Contributions Volunteers	Create project partnerships. Field surveys. Develop GIS. Develop poll information request form Survey local governments and DFW. Document PSM observations.	- GIS-based land-use and watershed characteristics analyses performed. (Yes or No & Quality) - Questionnaire mailed and followed with phone call & compile results (# completed, # of communities reached) - Field surveys performed in 7 Bellingham, Seattle, and Olympia watersheds & data entered. (# of streams surveyed. # of stream miles, # of fish examined) -Final report drafted. (Yes or No & Quality) -User friendly presentations developed by WA Trout (Yes or No & Quality) **Scientific/Data Track:** Presentation & Discussion with NOAA Scientists **Policy Track:** -----Presentations to 6 County Councils **Public Awareness Track:** Meet with Environmental groups and reporters.	**Agency Science Track:** Scientists at: USFWS, NMFS, and EPA. WDFW. County & City Planners **Community Track:** **Policy Track:** County & City Officials Environmental Groups Reporters **Public Awareness Track:** Citizens living by selected watersheds. Environmental Groups Reporters Developers, tribes and industries likely to impact selected streams.	**Agency Science Track:** NOAA Scientists are informed about study. (Scientists confirm value of study through letters of appreciation, references to study in other publications and presentations.) **Community Track:** **Policy Track:** Politicians are aware of the problem & scope of the crisis. (# of public forums & meetings with PSM on agenda. # of unsolicited inquiries from public officials .) **Public Awareness Track:** Public is aware of the problem & scope of the crisis. Media coverage. (Copies of newsletters & articles referencing the results of the study, including copies of same.) **ALL:** Study results and database available to everyone. (# of copies of report distributed to each target. # of public presentations. # of WEB hits on Database. # of unsolicited inquiries.)	**Agency Science Track:** NOAA Scientists use study results to explain mechanism for mortality and identify appropriate solutions. **Community Track:** **Policy Track:** Politicians pass land use regulations to lessen PSM. **Public Awareness Track:** Public is informed of behaviors that contribute to PSM & alternative practices. Public supports policy makers who are trying to solve the problem. **ALL:** Study results and database available to everyone. (# of copies of report distributed. # of presentations. # of WEB hits on Database.) NEXT GRANT???	**Agency Science Track:** Remediation techniques are evaluated in relationship to baseline data to validate and improve best management practices. Trends in PSM can document improvements over time. **Community Track:** **Policy Track:** Effective remediation techniques are adopted throughout the watersheds. Improved land use patterns. **Public Awareness Track:** Public supports policies & behavior changes become widespread **ALL:** Reduced PSM and Improved water quality. GIS information available for other uses and applications. NEXT GRANT???	**Agency Science Track:** **Goal 2 Clean Water** Objective 2.2.1 Improve Water Quality on a Watershed Basis. **Community Track:** **Goal 4 Healthy Communities and Ecosystems**, Objective 4.2.1 Sustain Community Health

Thick Line = Limit of Direct Grant Accountability